

# **ANALYTICAL ABSTRACTS**

**PUBLISHED BY**

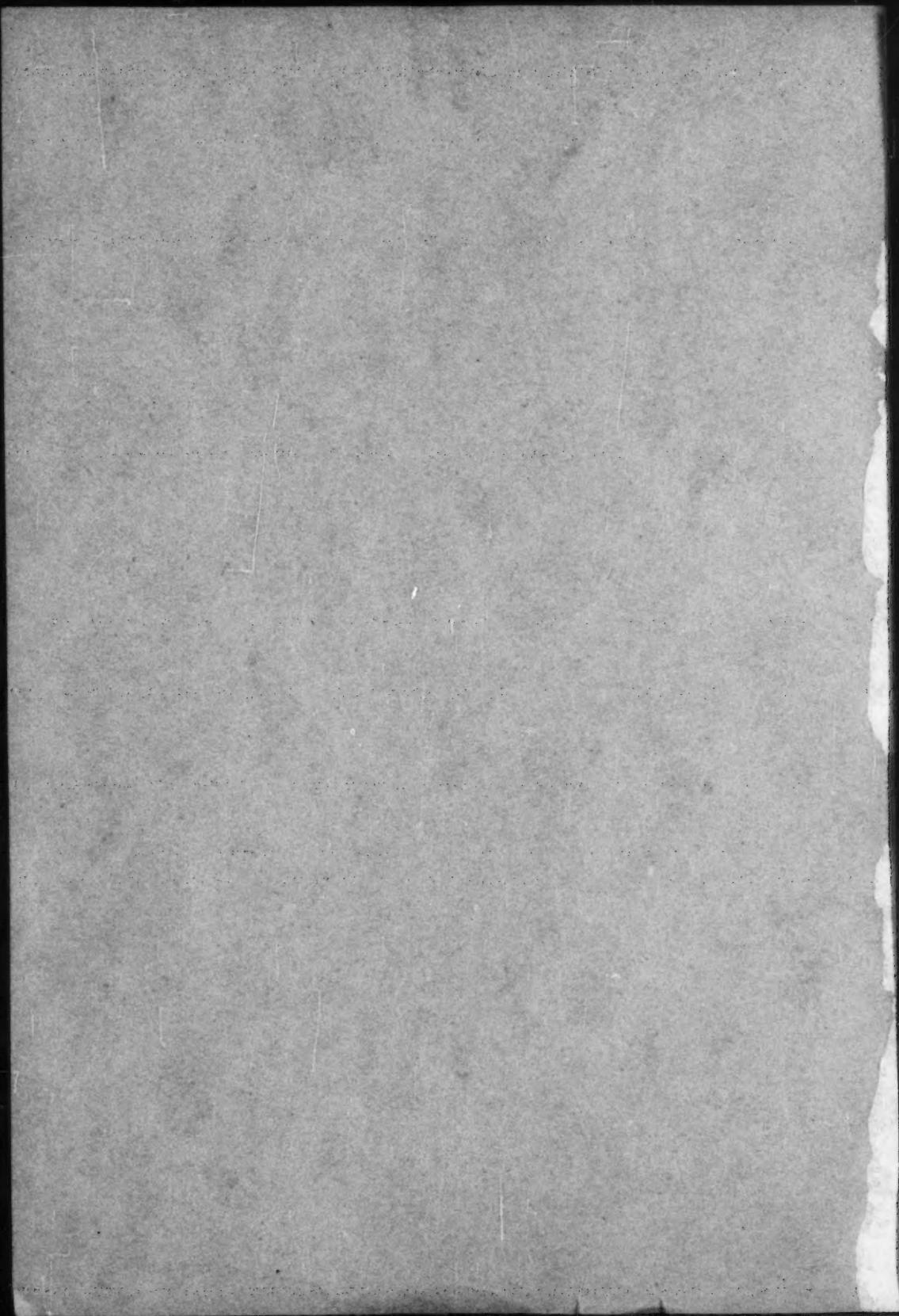
**The Society for Analytical Chemistry**

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**The Society for Analytical Chemistry**

A MONTHLY JOURNAL DEALING  
WITH ALL BRANCHES OF  
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**VOL. 10**

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# **ANALYTICAL ABSTRACTS**

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## JOURNALS

The following list contains the names of journals (and their abbreviations) from which papers have been abstracted regularly during the year. Journals that have been omitted are those that contain only an occasional analytical paper, and a number of Russian journals from which translated abstracts have been published through the medium of *Referativnyi Zhurnal*.

Abbreviated Title	FULL TITLE
<i>Acad. R.P.R., Baza Cercet. Științ. Timișoara, Stud. Cercet. Științ. Chim.</i>	Academia Republicii Populare Romîne, Baza de Cercetări Științifice Timișoara, Studii și Cercetări Științe Chimice
<i>Acad. R.P.R., Stud. Cercet. Chim.</i>	Academia Republicii Populare Romîne, Studii și Cercetări de Chimie
<i>Acta Chem. Scand.</i>	Acta Chemica Scandinavica
<i>Acta Chim. Acad. Sci. Hung.</i>	Acta Chimica Academae Scientiarum Hungaricae
<i>Acta Chim. Sinica</i>	Acta Chimica Sinica
<i>Acta Endocr., Copenhagen</i>	Acta Endocrinologica [Copenhagen]
<i>Acta Pharm. Hung.</i>	Acta Pharmacologica Hungarica
<i>Acta Pharm. Jugosl.</i>	Acta Pharmacologica Jugoslavica
<i>Acta Pharm. Tox., Khb.</i>	Acta Pharmacologica et Toxicologica [Copenhagen]
<i>Acta Polon. Pharm.</i>	Acta Poloniae Pharmaceutica
<i>Adv. X-ray Anal.</i>	Advances in X-Ray Analysis
<i>Amer. Dyest. Rep.</i>	American Dyestuff Reporter
<i>Amer. Ind. Hyg. Ass. J.</i>	American Industrial Hygiene Association Journal
<i>Amer. J. Clin. Path.</i>	American Journal of Clinical Pathology
<i>Amer. J. Med. Technol.</i>	American Journal of Medical Technology
<i>Anal. Biochem.</i>	Analytical Biochemistry
<i>Anal. Chem.</i>	Analytical Chemistry
<i>Anal. Chim. Acta</i>	Analytica Chimica Acta
<i>Analyst</i>	The Analyst
<i>Analyzer</i>	The Analyzer
<i>An. Asoc. Quím. Argentina</i>	Anales de la Asociación Química Argentina
<i>Angew. Chem., Int. Ed.</i>	Angewandte Chemie, International Edition
<i>Annalen</i>	Justus Liebigs Annalen der Chemie
<i>Ann. Biol. Clin.</i>	Annales de Biologie Clinique [Paris]
<i>Ann. Chim., Roma</i>	Annali di Chimica [Rome]
<i>Ann. Falsif. Expert. Chim.</i>	Annales des Falsifications et de l'Expertise Chimique
<i>Ann. Pharm. Franç.</i>	Annales Pharmaceutiques Françaises
<i>An. Real Soc. Esp. Fis. Quím., B</i>	Anales de la Real Sociedad Española de Física y Química, Serie B [Madrid]
<i>An. Științ. Univ. "Al. I. Cuza," Iași, Sect. I</i>	Analele Științifice ale Universității "Al. I. Cuza" din Iași, Section I
<i>Antibiot. &amp; Chemother.</i>	Antibiotics & Chemotherapy
<i>Antibiotiki</i>	Antibiotiki [Moscow]
<i>Appl. Optics</i>	Applied Optics
<i>Appl. Spectroscopy</i>	Applied Spectroscopy
<i>Arch. Biochem. Biophys.</i>	Archives of Biochemistry and Biophysics
<i>Arch. Eisenhüttenw.</i>	Archiv für das Eisenhüttenwesen
<i>Arch. Pharm., Berlin</i>	Archiv der Pharmazie und Berichte der Deutschen Pharmazeutischen Gesellschaft
<i>Arch. Pract. Pharm., Japan</i>	Archives of Practical Pharmacy [Japan]
<i>Ark. Kemi</i>	Arkiv för Kemi [Stockholm]
<i>Arzneimittel-Forsch.</i>	Arzneimittel-Forschung
<i>Atomnaya Energiya</i>	Atomnaya Energiya [Moscow]
<i>Azerb. Khim. Zhur.</i>	Azerbaidzhanskii Khimicheskii Zhurnal
<i>B.C.I.R.A. Journal</i>	B.C.I.R.A. Journal [British Cast Iron Research Association]
<i>Ber. dtsch. keram. Ges.</i>	Bericht der deutschen keramischen Gesellschaft und des Vereins deutscher Emailfachleute e. V.
<i>Biochem. Biophys. Res. Commun.</i>	Biochemical and Biophysical Research Communications
<i>Biochem. J.</i>	Biochemical Journal
<i>Biochem. Z.</i>	Biochemische Zeitschrift
<i>Biochim. Biophys. Acta</i>	Biochimica et Biophysica Acta
<i>Biokhimiya</i>	Biokhimiya [Moscow]
<i>Boll. Chim. Farm.</i>	Bollettino Chimico Farmaceutico [Milan]
<i>Boll. Lab. Chim. Provinciali</i>	Bollettino dei Laboratori Chimici Provinciali [Bologna]
<i>Boll. Soc. Ital. Biol. Sper.</i>	Bollettino della Società Italiana di Biologia Sperimentale
<i>Brauwissenschaft</i>	Brauwissenschaft
<i>BrennstChemie</i>	Brennstoff-Chemie
<i>Brit. J. Appl. Phys.</i>	British Journal of Applied Physics
<i>Brit. Med. J.</i>	British Medical Journal
<i>Bull. Chem. Soc. Japan</i>	Bulletin of the Chemical Society of Japan
<i>Bull. Res. Council Israel</i>	Bulletin of the Research Council of Israel

## JOURNALS

Abbreviated Title	FULL TITLE
Bull. Soc. Chim. Belg.	Bulletin des Sociétés Chimiques Belges
Bull. Soc. Chim. Biol.	Bulletin de la Société de Chimie Biologique
Bull. Soc. Chim. France	Bulletin de la Société Chimique de France
Bull. Soc. Pharm. Bordeaux	Bulletin de la Société de Pharmacie de Bordeaux
Bull. Soc. Pharm. Marseille	Bulletin de la Société de Pharmacie de Marseille
Canad. J. Biochem. Physiol.	Canadian Journal of Biochemistry and Physiology
Canad. J. Chem.	Canadian Journal of Chemistry
Cereal Chem.	Cereal Chemistry
Českosl. Farm.	Československá Farmacie
Chem. Anal., Warsaw	Chemia Analityczna [Warsaw]
ChemikerZtg	Chemiker-Zeitung - Chemische Apparatur
Chem. & Ind.	Chemistry & Industry
Chem.-Ing.-Tech.	Chemie-Ingenieur-Technik
Chemist Analyst	Chemist-Analyst
Chemistry, Taipei	Chemistry, Taipei
Chem. Listy	Chemicke Listy [Prague]
Chem. Pharm. Bull., Japan	Chemical & Pharmaceutical Bulletin [Japan]
Chem. Průmysl	Chemický Průmysl [Prague]
Chem. Tech., Berlin	Chemische Technik [Berlin]
Chem. Weekbl.	Chemisch Weekblad
Chem. Zvesti	Chemické Zvesti [Bratislava]
Chim. Anal.	Chimie Analytique
Chimia	Chimia [Switzerland]
Chim. e Ind.	Chimica e l'Industria [Milan]
Clin. Chem.	Clinical Chemistry [Baltimore, U.S.A.]
Clin. Chim. Acta	Clinica Chimica Acta
Coll. Czech. Chem. Commun.	Collection of Czechoslovak Chemical Communications
Compt. Rend.	Compte Rendu Hebdomadaire des Séances de l'Académie des Sciences
Compt. Rend. Acad. Bulg. Sci.	Compte Rendu de l'Académie Bulgare des Sciences
Croat. Chem. Acta	Croatica Chemica Acta
Curr. Sci.	Current Science [India]
Dissert. Abstr.	Dissertation Abstracts
Dissert. Pharm., Kraków	Dissertationes Pharmaceuticae [Kraków]
Dokl. Akad. Nauk SSSR	Dokladý Akademii Nauk SSSR
Dtsch. ApothZtg	Deutsche Apotheker-Zeitung
Dtsch. LebensmittelRdsch.	Deutsche Lebensmittel-Rundschau
Erdöl u. Kohle	Erdöl und Kohle, Erdgas, Petrochemie
Ernährungsforschung	Ernährungsforschung
Experientia	Experientia [Basle]
F.A.O. Plant Prot. Bull.	F.A.O. Plant Protection Bulletin
Farbe u. Lack	Farbe und Lack
Farmaco, Ed. Prat.	Farmaco, Edizione Pratica
Faserforsch. u. Textiltech.	Faserforschung und Textiltechnik
Fette, Seif., Anstrichmitt.	Fette, Seifen, Anstrichmittel
Geochim. et Cosmochim. Acta	Geochimica et Cosmochimica Acta [London]
Geokhimiya	Geokhimiya [Moscow]
Gidrokhim. Materialy	Gidrokhimicheskie Materialy
Glas-Instrum.-Tech.	Glas-Instrumenten-Technik
Glasnik Hem. Društva, Beograd	Glasnik Hemijskog Društva, Beograd
Glastech. Ber.	Glastechnische Berichte
Grasas y Aceites	Grasas y Aceites [Seville]
Helv. Chim. Acta	Helvetica Chimica Acta
Hilger J.	Hilger Journal
Hučn. Listy	Hučné Listy [Prague]
Ind. Chem.	Industrial Chemist
Indian J. Pharm.	Indian Journal of Pharmacy
Inf. Quím. Anal.	Información de Química Analítica [Madrid]
Israel Atomic Energy Comm.	Israel Atomic Energy Commission. Reports.
Ital. J. Biochem.	Italian Journal of Biochemistry
Izv. Akad. Nauk ArmSSR, Khim. Nauk.	Izvestiya Akademii Nauk Armyanskoi SSR, Khimicheskie Nauki
Izv. Akad. Nauk SSSR, Otdel. Khim. Nauk	Izvestiya Akademii Nauk SSSR, Otdelenie Khimicheskikh Nauk

## JOURNALS

Abbreviated Title	FULL TITLE
Izv. Akad. Nauk SSSR, Ser. Fiz.	Izvestiya Akademii Nauk SSSR Seriya Fizicheskaya
Izv. Vyssh. Ucheb. Zavedenii, Khim. i Khim.-Tekhnol.	Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya
J. Agric. Food Chem. . . . .	Journal of Agricultural and Food Chemistry [Washington, D.C.]
J. Amer. Chem. Soc. . . . .	Journal of the American Chemical Society
J. Amer. Oil Chem. Soc. . . . .	Journal of the American Oil Chemists' Society
J. Amer. Wat. Wks Ass. . . . .	Journal of the American Water Works Association
Japan Analyst . . . . .	Japan Analyst
J. Appl. Chem. . . . .	Journal of Applied Chemistry [London]
J. Ass. Off. Agric. Chem. . . . .	Journal of the Association of Official Agricultural Chemists
J. Atomic Energy Soc. Japan . . . . .	Journal of the Atomic Energy Society of Japan
J. Biol. Chem. . . . .	Journal of Biological Chemistry
J. Chem. Educ. . . . .	Journal of Chemical Education
J. Chem. Soc. . . . .	Journal of the Chemical Society
J. Chem. Soc. Japan, Ind. Chem. Sect. . . . .	Journal of the Chemical Society of Japan, Industrial Chemistry Section
J. Chim. Phys. . . . .	Journal de Chimie Physique
J. Chinese Chem. Soc. . . . .	Journal of the Chinese Chemical Society [Taiwan]
J. Chromatography . . . . .	Journal of Chromatography
J. Dairy Res. . . . .	Journal of Dairy Research
J. Dairy Sci. . . . .	Journal of Dairy Science
J. Electroanal. Chem. . . . .	Journal of Electroanalytical Chemistry
J. Electrochem. Soc., N.Y. . . . .	Journal of the Electrochemical Society [New York]
J. Food Sci. . . . .	Journal of Food Science
J. Gas Chromatography . . . . .	Journal of Gas Chromatography
J. Indian Chem. Soc. . . . .	Journal of the Indian Chemical Society
J. Inst. Brewing . . . . .	Journal of the Institute of Brewing
J. Instn Chem., India . . . . .	Journal and Proceedings of the Institution of Chemists [India]
J. Inst. Petrol. . . . .	Journal of the Institute of Petroleum
J. Iron St. Inst. . . . .	Journal of the Iron and Steel Institute
J. Japan Inst. Metals, Sendai . . . . .	Journal of the Japan Institute of Metals [Sendai]
J. Lab. Clin. Med. . . . .	Journal of Laboratory and Clinical Medicine
J. Lipid Res. . . . .	Journal of Lipid Research [Washington, D.C.]
J. Med. Lab. Technol. . . . .	Journal of Medical Laboratory Technology
J. Metal Finishing Soc. Japan . . . . .	Journal of The Metal Finishing Society of Japan
J. Pharm. Pharmacol. . . . .	Journal of Pharmacy and Pharmacology
J. Pharm. Sci. . . . .	Journal of Pharmaceutical Science
J. Pharm. Soc. Japan . . . . .	Journal of the Pharmaceutical Society of Japan
J. Phys. Chem. . . . .	Journal of Physical Chemistry
J. Polarographic Soc. . . . .	Journal of the Polarographic Society
J. prakt. Chem. . . . .	Journal für praktische Chemie
J. Res. Natl. Bur. Stand., A . . . . .	Journal of Research of the National Bureau of Standards, Section A
J. Sci. Food Agric. . . . .	Journal of the Science of Food and Agriculture
J. Sci. Ind. Res., India (B and D) . . . . .	Journal of Scientific and Industrial Research [India], Sections B and D
J. Sci. Instrum. . . . .	Journal of Scientific Instruments
J. Soc. Cosmet. Chem. . . . .	Journal of the Society of Cosmetic Chemists
J. Soc. Leath. Tr. Chem. . . . .	Journal of the Society of Leather Trades' Chemists
J. Wat. Pollut. Control Fed. . . . .	Journal of the Water Pollution Control Federation
Kauchuk i Rezina . . . . .	Kauchuk i Rezina [USSR]
Kem. u Ind., Zagreb . . . . .	Kemija u Industriji [Zagreb]
Khlebopekar. i Konditer. Prom. . . . .	Khlebopekarnaya i Konditerskaya Promyshlennost [USSR]
Klin. Wochschr. . . . .	Klinische Wochenschrift
Lab. Delo . . . . .	Laboratornoe Delo [Moscow]
Lab. Practice . . . . .	Laboratory Practice
Lancet . . . . .	Lancet
Listy Cukr. . . . .	Listy Cukrovarnické
Magyar Kém. Foly.	Magyar Kémiai Folyóirat
Magyar Kém. Lapja . . . . .	Magyar Kémikusok Lapja
Makromol. Chem. . . . .	Makromolekulare Chemie
Maslob.-Zhirk. Prom. . . . .	Maslobofno-Zhirovaya Promyshlennost [USSR]
Materialprüfung . . . . .	Materialprüfung
Mater. Res. & Stand. . . . .	Materials Research and Standards
Melliand Textilber. . . . .	Melliand Textilberichte
Metallurgia, Manchr. . . . .	Metallurgia [Manchester]
Metallurg. Ital. . . . .	Metallurgia Italiana [Milan]

## JOURNALS

Abbreviated Title	FULL TITLE
<i>Microchem. J.</i> .....	Microchemical Journal
<i>Mikrochim. Ichnoanal. Acta</i> .....	Mikrochimica et Ichnoanalytica Acta [Vienna]
<i>Mitt. Lebensmitt. Hyg., Bern</i> .....	Mitteilungen aus dem Gebiete der Lebensmitteluntersuchung und Hygiene [Bern]
<i>Monatsh. Chem.</i> .....	Monatshefte für Chemie und verwandte Teile anderer Wissenschaften [Vienna]
<i>Mschir. Brauerei</i> .....	Monatsschrift für Brauerei
<i>Nahrung</i> .....	Nahrung
<i>Nature</i> .....	Nature [London]
<i>Naturwissenschaften</i> .....	Naturwissenschaften
<i>Neftekhimiya</i> .....	Neftekhimiya [USSR]
<i>Norsk Skogind.</i> .....	Norsk Skogindustri
<i>Nucl. Sci. Engng</i> .....	Nuclear Science and Engineering
<i>Optika i Spektroskopiya</i> .....	Optika i Spektroskopiya [USSR]
<i>Papir a Celulosa</i> .....	Papír a Celulosa [Prague]
<i>Path. Biol. Semaine Hôp.</i> .....	Pathologie et Biologie, La Semaine des Hôpitaux
<i>Peint.-Pigm.-Vern.</i> .....	Peintures-Pigments-Vernis
<i>Perfum. Essent. Oil Rec.</i> .....	Perfumery and Essential Oil Record
<i>Pharm. Acta Helv.</i> .....	Pharmacœutica Acta Helveticae
<i>Pharmazie</i> .....	Pharmazie
<i>Pharm. Weekbl.</i> .....	Pharmaceutisch Weekblad
<i>Pharm. Zentralh.</i> .....	Pharmazeutische Zentralhalle für Deutschland
<i>Photoelect. Spectr. Gr. Bull.</i> .....	Photoelectric Spectrometry Group Bulletin
<i>Plaste u. Kautsch.</i> .....	Plaste und Kautschuk
<i>Plast. Massy</i> .....	Plastichekie Massy [USSR]
<i>Pochvovedenie</i> .....	Pochvovedenie [USSR]
<i>Průmysl Potravin</i> .....	Průmysl Potravin [Prague]
<i>Pure &amp; Appl. Chem.</i> .....	Pure and Applied Chemistry
<i>Quím. e Ind., Bilbao</i> .....	Química e Industria [Bilbao]
<i>Radiokhimiya</i> .....	Radiokhimiya [USSR]
<i>R.C. Ist. Sup. Sanit.</i> .....	Rendiconti Istituto Superiore di Sanità
<i>Rec. Trav. Chim. Pays-Bas</i> .....	Recueil des Travaux Chimiques des Pays-Bas
<i>Rep. Gov. Ind. Res. Inst., Nagoya</i> .....	Reports of the Government Industrial Research Institute, Nagoya
<i>Rep. Invest. U.S. Bur. Min.</i> .....	Report of Investigations. U.S. Bureau of Mines
<i>Rev. Asoc. Bioquím. Argentina</i> .....	Revista de la Asociación Bioquímica Argentina
<i>Rev. Chim., Acad. R.P.R.</i> .....	Revue de Chimie, Académie de la République Populaire Roumaine
<i>Rev. Chim., Bucharest</i> .....	Revista de Chimie [Bucharest]
<i>Rev. Fac. Ing. Quím., Argentina</i> .....	Revista de la Facultad de Ingeniería Química, Universidad Nacional del Litoral, Santa Fé [Argentina]
<i>Rev. Inst. Franç. Pétrole</i> .....	Revue de l'Institut Français du Pétrole et Annales des Combustibles Liquides [Paris]
<i>Rev. Sci. Instrum.</i> .....	Review of Scientific Instruments
<i>Rev. Univ. Ind. Santander, Colombia</i> .....	Revista de la Universidad de la Industrial de Santander [Colombia]
<i>Riechstoffe u. Aromen</i> .....	Riechstoffe und Aromen
<i>Riv. Ital. Sostanze Grasse</i> .....	Rivista Italiana delle Sostanze Grasse
<i>Roczn. Zahl. Hig., Warsaw</i> .....	Roczniki Panstwowego Zakładu Higieny [Warsaw]
<i>Sb. Trud. Tsentr. Nauch.-Issled. Inst. Chern. Metallurg.</i> .....	Sbornik Trudov Tsentral'nogo Nauchno-Issledovatel'skogo Instituta Chernoi Metallurgii
<i>Scand. J. Clin. Lab. Invest.</i> .....	Scandinavian Journal of Clinical & Laboratory Investigation
<i>Sci. &amp; Cult.</i> .....	Science and Culture [Calcutta]
<i>Science</i> .....	Science [New York]
<i>Sci. Pharm.</i> .....	Scientia Pharmaceutica [Vienna]
<i>Sklář a Keram.</i> .....	Sklář a Keramik [Prague]
<i>Spectrochim. Acta</i> .....	Spectrochimica Acta
<i>Stärke</i> .....	Stärke
<i>Stud. Cercet. Chim., Cluj</i> .....	Studii și Cercetări de Chimie [Cluj]
<i>Suomen Kem.</i> .....	Suomen Kemistilehti [Helsinki]
<i>Svensk Kem. Tidskr.</i> .....	Svensk Kemisk Tidskrift
<i>Svensk Papp-Tidn.</i> .....	Svensk Papperstidning [Stockholm]
<i>Talanta</i> .....	Talanta
<i>Trans. Instn Min. Metall., Lond.</i> .....	Transactions of the Institution of Mining and Metallurgy [London]

## JOURNALS

Abbreviated Title	FULL TITLE
<i>Trans. Nat. Res. Inst. Met., Japan</i> ..	Transactions of the National Research Institute for Metals [Japan]
<i>Trudы Inst. Metallurg. Akad. Nauk SSSR,</i>	Trudы Instituta Metallurgii, Akademii Nauk SSSR
<i>Trudы Kazakh. Nauch.-Issled. Inst. Mineral.</i>	Trudы Kazakhskogo Nauchno-Issledovatel'skogo Instituta
<i>Syr'ya</i>	Mineral'nogo Syr'ya
<i>Trudы Ural'sk. Politekh. Inst.</i> ..	Trudы Ural'skogo Politekhnicheskogo Instituta
<i>Ukr. Fiz. Zhur.</i> .. .. ..	Ukrainskii Fizichniil Zhurnal
<i>Ukr. Khim. Zhur.</i> .. .. ..	Ukrainskii Khimicheskii Zhurnal
<i>Unicam Spectrovision</i> .. .. ..	Unicam Spectrovision
<i>U.S. Atomic Energy Comm.</i> .. .. ..	United States Atomic Energy Commission. Reports
<i>U.S. Geol. Surv., Profess. Papers</i> .. .. ..	United States Department of the Interior, Geological Survey. Professional Papers.
<i>Vestn. Leningr. Univ., Ser. Fiz. i Khim.</i>	Vestnik Leningradskogo Universiteta, Seriya Fiziki i Khimii
<i>Vestn. Moskov. Univ., Ser. Khim.</i> .. .. ..	Vestnik Moskovskogo Universiteta, Seriya Khimiya
<i>Z. anal. Chem.</i> .. .. ..	Zeitschrift für analytische Chemie
<i>Z. anorg. Chem.</i> .. .. ..	Zeitschrift für anorganische (und allgemeine) Chemie
<i>Zavod. Lab.</i> .. .. ..	Zavodskaya Laboratoriya [Moscow]
<i>Z. Chem.</i>	Zeitschrift für Chemie
<i>Zhur. Anal. Khim.</i> .. .. ..	Zhurnal Analiticheskoi Khimii
<i>Zhur. Neorg. Khim.</i> .. .. ..	Zhurnal Neorganicheskoi Khimii
<i>Zhur. Obshch. Khim.</i> .. .. ..	Zhurnal Obshchel Khimii
<i>Zhur. Prikl. Khim.</i> .. .. ..	Zhurnal Prikladnol Khimii
<i>Zhur. Vses. Khim. Obshch. im. D.I. Mendeleva</i>	Zhurnal Vsesoyuznogo Khimicheskogo Obshchestva imeni D. I. Mendeleva
<i>Z. LebensmittelUntersuch.</i> .. .. ..	Zeitschrift für Lebensmittel-Untersuchung und -Forschung
<i>Z. physiol. Chem.</i> .. .. ..	Zeitschrift für physiologische Chemie

## ACKNOWLEDGEMENTS

The organisations publishing the following journals are thanked for allowing reproduction of some abstracts.

Abstract Bulletin of the Institute of Paper Chemistry  
 Aluminium Abstracts  
 British Ceramic Society Abstracts  
 Chemical Abstracts  
 Fuel Abstracts and Current Titles  
 Hungarian Technical Abstracts  
 Journal of Applied Chemistry Abstracts  
 Journal of Electroanalytical Chemistry Abstracts  
 Journal of the Institute of Brewing Abstracts  
 Journal of the Institute of Petroleum Abstracts  
 Journal of the Iron and Steel Institute Abstracts  
 Journal of the Science of Food and Agriculture Abstracts  
 Light Metals Bulletin  
 Nuclear Science Abstracts  
 Nutrition Abstracts and Reviews  
 Referativnyi Zhurnal. Khimiya, Sections 19GDE and 19R  
 Review of Current Literature on the Paint and Allied Industries  
 Shirley Institute. Summary of Current Literature  
 Sugar Industry Abstracts  
 Water Pollution Abstracts

## ERRATA

VOL. 1, 1954

Abstract	
No.	Line
2622	4 for C. Abrisqueta read C. Abrisqueta Herrera

VOL. 2, 1955

Index, p. xxiv, column 2, line 50, the entry for **Freiser, H.**, should read See **Johnston, W. D.**, 29, 259, and **Melnick, L. M.**, 2346.

Index, p. xxv, column 1, line 4, delete the entry for **Frieser, H.**

Abstract	
No.	Line
2346	3 for H. Frieser read H. Freiser
2750	2 for A. N. Matveyeva read A. N. Mateeva

VOL. 3, 1956

Index, p. 1, column 2, line 9, the number of the second abstract in the entry for **Lothe, J. J.** should be 3039, not 2039.

Abstract	
No.	Line
2142	2 for <b>6-sec.-butyl-2:4-dinitrobutylphenol</b> read <b>6-sec.-butyl-2:4-dinitropheno</b>

VOL. 6, 1959

Abstract	
No.	Line
4775	2 for a dithiocarbamoylhydrazinium salt read the hydrazinium salt of hydrazinedithiocarboxylic acid
4775	6.7 for a dithiocarbamoylhydrazinium salt read the hydrazinium salt of hydrazinedithiocarboxylic acid

VOL. 7, 1960

Abstract	
No.	Line
581	4 for S. E. Rogozinski read S. Ehrlich-Rogozinski
628	2 for C. Norwitz read G. Norwitz
753	3 for J. Gracián read J. Gracián Tous
1543	2 for O. T. Ratycz read O. T. Ratyez
2625	2 for W. Bendt read W. Berndt
5478	3 for J. F. Oldfield read J. F. Oldfield

VOL. 8, 1961

Abstract	
No.	Line
487	2 for I. I. Stronskij read I. Stronskij
2124	1 for Z. Vejdélek read Z. J. Vejdélek
2357	3 for M. W. Mallet read M. W. Mallett
2791	3 for E. Zapp read E. E. Zapp
4085	2 for E. Minchevski, Ya. Frýdel read J. Minczewski, J. Friedel
4473	3 for V. Stepin read V. V. Stepin

VOL. 9, 1962

Index, p. lxi, column 1, line 53, entry for **Howe, W. W.**, for porphyrin read porphyrin

Index, p. lxix, column 1, line 33, for **Kváček, M.** read **Kváček, M.**, and **Kühn, P.**

Index, p. lxxix, column 2, line 2, for **Mataschke** read **Matschke** and transpose this entry so that it follows the entry for **Matschiner**

Index, p. lxxxiii, column 1, line 33, for **Mistryukov** read **Mistryukov**

Index, p. xcix, column 2, line 23, for **Pfenniger** read **Pfenninger**

Index, p. cvii, column 1, line 32, for **Satyaranayanan** read **Satyaranayana**

Index, p. cxl, column 1, line 10, for **Mataschke** read **Matschke**

Abstract	
No.	Line
1214	8 after chromatoplates insert (Merck's Silica Gel G)
1533	3 for H. Pfenniger read H. Pfenninger
1750	2 for E. A. Mistryukov read E. A. Mistryukov
1819	4 for H.-D. Mataschke read H.-D. Matschke

ERRATA

VOL. 10, 1963

*Abstract*

No.

Line

- 100 29 for C.I. Mordant Black 9 *read* C.I. Mordant Black 3  
 124 4 for S. Katz *read* Sidney Katz  
 138 9 for Fe<sup>III</sup> *read* Fe<sup>II</sup>  
 142 2 for B. Sagortschew, L. Bozadzhieva *read* B. Zagorchev, L. Bozadzhieva  
 314 9 for H<sub>2</sub>O, serum with physiological saline, *read* H<sub>2</sub>O, and serum with physiological saline,  
 331 2 for K. J. Freund *read* K. J. Freundt  
 370 2 for — Touye *read* S. Touyé  
 387 2 for T. Bellar *read* T. A. Bellar  
 429 3 for H. F. Beckman *read* Herman Ferdinand Beckman  
 481 2 for D. P. Scherbov *read* D. P. Shcherbov  
 703 3 for D. J. David *read* David John David  
 765 14,15 for 3 $\alpha$ ,17-dihydroxy-17 $\beta$ -methyl-D-homo-5 $\beta$ -androstan-17 $\alpha$ -one *read* 3 $\alpha$ ,17-dihydroxy-  
     17 $\beta$ -methyl-D-homo-5 $\beta$ -androstan-17 $\alpha$ -one  
 820 2 for — Maljournal *read* M. Maljournal  
 911 22,23,24 for 8-(7-amino-1-hydroxy-3-sulpho-2-naphthylazo)-2-hydroxynaphthalene-7-sul-  
     phonic acid *read* 8-(7-amino-1-hydroxy-3-sulpho-2-naphthylazo)-7-hydroxynaph-  
     thalene-1-sulphonic acid  
 922 3 for L. M. Mosova *read* L. N. Mosova  
 951 2 for Ramesh Chandro *read* Ramesh Chandra  
 972 Column 2, line 19, for AsO<sub>4</sub><sup>3-</sup> *read* AsO<sub>4</sub><sup>2-</sup>  
 1065 3 for M. S. Bigdergauz *read* M. S. Vigdergauz  
 1084 12,14 for butane-2,3-diol *read* butane-1,4-diol  
 1128 17 for 1 litre *read* 1 litre  
 1134 2,3 for [1,1-diphenyl-2-picrylphenylhydrazine] *read* [1,1-diphenyl-2-picrylhydrazine]  
 1134 6 for 1,1-Diphenyl-2-picrylphenylhydrazine *read* 1,1-Diphenyl-2-picrylhydrazine  
 1174 14,15 for 1.82 g of Isacen *read* 1.82 mg of Isacen  
 1227 21 for Gedroitsa *read* Gedroits  
 1496 2,3 for Fruchtsaft-Ind. *read* Fruchtsaft-Ind.  
 1667 22 for a given probability of risk, then, *read* then, for a given probability of risk,  
 1682 1 for pK<sub>b</sub>(H<sub>2</sub>O) *read* pK<sub>b</sub>(H<sub>2</sub>O)  
 1710 7 insert in after 0.1N  
 1782 27 for dilute the extract *read* dilute the extracted soln.  
 1813 2 for S. I. Ginzburg *read* S. I. Ginsburg  
 1867 2 for D. W. Brink *read* Denise W. Brink  
 1889 3 for H. J. Rummlen *read* H. J. Rummler  
 2171 18 for <10:1 *read* >10:1 and for >50:1 *read* <50:1  
 2449 2 for H. Wagner *read* Hildebert Wagner  
 2556 2 after Harrogate, May 1962, insert A. Franks.  
 2816 2 for D. J. David *read* David John David  
 2904 4 for Diary *read* Dairy  
 2948 3 for Y. Dong *read* Y.-M. Dong  
 2952 3 for H. Beckman *read* Herman Beckman  
 3319 9 for fluorobutyl- *read* s-butyl-  
 3201 2 for S. A. Katz *read* Sidney A. Katz  
 3202 3 for S. A. Katz *read* Sidney A. Katz  
 The number of the abstract after 3395 should be 3396  
 3416 4 for H. Wagner *read* Hildebert Wagner  
 3425 12 for dilute the soln. with acetone to 10 ml *read* dilute the soln. with acetone to 50 ml  
 3580 9 for K. Ebarta *read* K. Ebata  
 3580 10 for K. Nakano *read* Kunio Nakano  
 3560 11 for M. Suzuki *read* Makoto Suzuki  
 3560 17 for M. Suzuki *read* Masami Suzuki  
 3560 26 for T. Nishimura *read* Toshio Nishimura  
 3581 2 for Ib. *read* II.  
 3581 14 for Ia *read* I  
 3614 2 for A. N. Ziadé *read* A. N. Zaïdel'  
 3622 7 insert refined after in  
 3646 4 for An. Real Soc. Esp. Quím., B, *read* An. Real Soc. Esp. Fis. Quím., B,  
 3687 6 delete soln.  
 3687 7 after (maltool) insert soln.  
 3709 3 for S. Mliník *read* S. Mlinkó  
 3730 10 for trimethylpentane (1:4) and 3:2 *read* trimethylpentane (1:4) and (3:2)  
 3816 9 for 0.1M-KI *read* 0.1M-KI  
 3856 2 for H. W. Untermaier *read* W. H. Untermaier  
 3907 10 for 8-apo- $\beta$ -carotenal *read* 8'-apo- $\beta$ -carotenal  
 3920 2 for Mlle Touyé *read* S. Touyé  
 Column 2, line 8 for R. P. Lastovsky, *read* R. P. Lastovskii,  
 Column 2, line 9, for N. M. Djatlova, V. J. Tjemkina *read* N. M. Dyatlova, V. Ya. Temkina  
 Column 2, line 10, for O. U. Lavrova *read* O. Yu. Lavrova  
 4112 9 for (SO<sub>3</sub>)<sup>2-</sup> *read* (SO<sub>4</sub>)<sup>2-</sup>

ERRATA

Vol. 10, 1963

<i>Abstract No.</i>	<i>Line</i>
4184	6 for Ru read RuO <sub>4</sub>
4302	2 for H. J. Wagner read Hans J. Wagner
4349	28 for 0.2M-K <sub>2</sub> CdI <sub>4</sub> read 0.2M-K <sub>2</sub> CdI <sub>4</sub>
4355	5 for H. Wagner read Hildebert Wagner
4370	3 for Mlle Leroy read H. Leroy
4404	14 insert that after fraction
4528	35 delete lead before basis
4551	1 insert <b>Chelatometric methods in applied analysis. XI. before Analysis</b>
4554	7 for H <sup>1</sup> H and <sup>2</sup> H read H <sup>1</sup> H and <sup>2</sup> H <sub>2</sub>
4584	10 delete the comma after Fe
4617	18 for 130-13 VC/178 read 130-13 VC/356
4634	3 insert Z. before phys.
4765	2 for H. Wagner read Hildebert Wagner
4800	1,2 for 4-chloro-2-hydroxybenzbutylamide read N-butyl-4-chloro-2-hydroxybenzamide
4800	6 for 4-chloro-2-hydroxybenzbutylamide read N-butyl-4-chloro-2-hydroxybenzamide
4802	3 for J. W. Wells read W. W. Wells
4888	2 delete of
4930	11 delete a before highly
4976	2 for S. Katz read Samuel Katz
5035	3 delete N'N'N''-
5068	8 for 3 ml read 1 ml
5076	24 for Zn(C <sub>6</sub> H <sub>5</sub> ON) <sub>2</sub> read Zn(C <sub>6</sub> H <sub>5</sub> ON) <sub>2</sub>
5120	9 for 1-(2-pyridylazo)resorcinol read 4-(2-pyridylazo)resorcinol
5130	5,6,7 for 5-chloro-2-hydroxy-3-(2,4-dehydroxyphenylazo)benzenesulphonic acid read 5-chloro-2-hydroxy-3-(2,4-dihydroxyphenylazo)benzenesulphonic acid
5132	11 insert hyphen at end of line
5149	18 for NaNO read NaNO <sub>3</sub>
5242	24 for radiometric titration read radiometric titration
5261	2 for H. Wagner read Herbert Wagner
5305	3 for E. Haahti read E. O. A. Haahti
5325	3 for L. M. Bergquist read L. M. Bergquist
5359	4 for H. Wagner read Hildebert Wagner

Cross references after abstract 923, line 9, for IC<sub>3</sub> read 1Cl<sub>3</sub>

Cross references after abstract 1994, line 4, after products. insert 1730. Determination of mercury.

Cross references after abstract 3056, line 14, for 3236, read 3237.

Cross references after abstract 4710, line 4, for Cu read Fe

*Note*—Some errata subsequently published in the journals abstracted are included.

## ABBREVIATIONS

Certain abbreviations in everyday use are not included in the following list. When any doubt might arise from the use of an abbreviation or symbol the word is printed in full.

alternating current . . . . .	a.c.	millilitre . . . . .	ml
ampere . . . . .	amp.	millimetre . . . . .	mm
Ångström unit . . . . .	Å	millimicrogram . . . . .	$m\mu g$
anhydrous . . . . .	anhyd.	millimolar . . . . .	$mM$
approximate, -ly . . . . .	approx.	millivolt . . . . .	$mV$
aqueous . . . . .	aq.	minute (time) . . . . .	min.
boiling-point . . . . .	b.p.	molar (concentration) . . . . .	M
calorie (large) . . . . .	kg.cal.	molecul-e, -ar . . . . .	mol.
calorie (small) . . . . .	g.cal.	normal (concentration) . . . . .	N
centimetre . . . . .	cm	optical rotation . . . . .	$\alpha$
coefficient . . . . .	coeff.	ounce . . . . .	oz.
Colour Index (2nd Edition) . . . . .	C.I.	parts per million . . . . .	p.p.m.
concentrated . . . . .	conc.	per cent. . . . .	$\%$
concentration . . . . .	concn.	per cent. (vol. in vol.) . . . . .	$\% (v/v)$
crystalline, -sed . . . . .	cryst.	per cent. (wt. in vol.) . . . . .	$\% (w/v)$
cubic . . . . .	cu.	per cent. (wt. in wt.) . . . . .	$\% (w/w)$
current density . . . . .	c.d.	potential difference . . . . .	p.d.
cycles per second . . . . .	c/s	precipitate (as a noun) . . . . .	ppt.
density . . . . .	$\rho$	precipitated . . . . .	pptd.
density, relative . . . . .	$d$ or wt. per ml	precipitating . . . . .	pptg.
dilute (as adjective) . . . . .	dil.	precipitation . . . . .	pptn.
direct current . . . . .	d.c.	preparation . . . . .	prep.
electromotive force . . . . .	e.m.f.	qualitative, -ly . . . . .	qual.
electron volt . . . . .	eV	quantitative, -ly . . . . .	quant.
equivalent . . . . .	equiv.	recrystallised . . . . .	recryst.
ethylenediaminetetra-acetate . . . . .	EDTA	refractive index . . . . .	$n_A^t$
gram . . . . .	g	relative band speed . . . . .	$R_F$
gram-molecule . . . . .	mole	relative humidity . . . . .	r.h.
half-wave potential . . . . .	$E_{\frac{1}{2}}$	revolutions per minute . . . . .	r.p.m.
hour . . . . .	hr.	saponification value . . . . .	sap. val.
hydrogen ion exponent . . . . .	pH	saturated calomel electrode . . . . .	S.C.E.
infra-red . . . . .	i.r.	second (time) . . . . .	sec.
insoluble . . . . .	insol.	soluble . . . . .	sol.
international unit . . . . .	i.u.	solution . . . . .	soln.
ionic strength . . . . .	$I$	specific gravity . . . . .	sp. gr.
kilogram . . . . .	kg	specific rotation . . . . .	$[x]_A^t$
kilovolt . . . . .	kV	square centimetre . . . . .	sq. cm
kilowatt . . . . .	kW	standard temp. and pressure . . . . .	s.t.p.
maxim-um, -a . . . . .	max.	temperature . . . . .	temp.
melting-point . . . . .	m.p.	ultra-violet . . . . .	u.v.
microgram . . . . .	$\mu g$ (not $\gamma$ )	unit of pressure (mm Hg) . . . . .	torr
microlitre . . . . .	$\mu l$	vapour density . . . . .	v.d.
micromole . . . . .	$\mu$ mole	vapour pressure . . . . .	v.p.
micron . . . . .	$\mu$	volt . . . . .	V
milliampere . . . . .	mA	volume . . . . .	vol.
millicurie . . . . .	mC	watt . . . . .	W
milli-equivalent . . . . .	milli-equiv.	wavelength . . . . .	$\lambda$
milligram . . . . .	mg	weight . . . . .	wt.

In addition, the following symbols may be used in conjunction with numerical values or in mathematical expressions—

greater than . . . . .	>	less than . . . . .	<
not greater than . . . . .	$\geq$	not less than . . . . .	$\leq$
is proportional to . . . . .	$\propto$	of the order of, approximately	$\approx$

The principal Pharmacopoeias are denoted by B.P., U.S.P. or D.A.B., together with the identifying roman numeral or year.

Valency states are represented by a superscript roman numeral, e.g.,  $Fe^{II}$ ,  $Mo^{V}$ . Substances in the ionic state are represented by  $Na^+$ ,  $Fe^{2+}$ ,  $Fe^{3+}$ , etc., for cations and by  $Cl^-$ ,  $SO_4^{2-}$ ,  $PO_4^{3-}$ , etc., for anions.

The chemical nomenclature used in the abstracts is that recommended by The Chemical Society ("Handbook for Chemical Society Authors," The Chemical Society, London, 1961), and may differ from that used in the original articles.

Pesticides are named in accordance with the British Standard 1831 : 1961, "Recommended Common Names for Pesticides."

# **ANALYTICAL ABSTRACTS**

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**INDEX TO VOLUME 10**

**1963**

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THE STATE OF SOUTH DAKOTA, THE UNIVERSITY OF SOUTHERN CALIFORNIA, AND THE UNIVERSITY OF TORONTO

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